REMARKS

Claims 1, 2, 4-6 and 12 are pending in the present application.

Reexamination of the application and reconsideration of the rejections are respectfully requested in view of the following remarks.

The data provided in the original specification shows that the present coating composition enhances control over respiratory exchange and prolongs the shelf-life of post-harvest fruit.

I. Rejection under 35 U.S.C. § 103(a)

Claims 1, 2 and 12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott et al. (USPN 2,872,325) ("Scott") in view of Nisperos-Carriedo et al. (USPN 5,376,391) ("Nisperos-Carriedo") further in view of Liu (USPN 4,710,388) ("Lui"). OA, p. 2. Applicant respectfully traverses.

The teachings of Scott with regard to the surfactant must be limited to those surfactants that one of ordinary skill in the art would have been motivated to use. Applicant submits herewith under 37 CFR § 116(e) a teaching from The Principles of Polymerization as evidence to rebut the final Office Action's new assertions that "Scott does not preclude use [sic] other emulsifiers" (Id. p. 4, lines 11-12), and that non-ionic and anionic surfactants are "functional equivalents"[1] (Id. at lines 16-18). Applicants note that Scott is not limited to the surfactant that gives the best result, but it is also not so broad as to encompass surfactants that are typically avoided. A reference may be relied upon for all that it would have *reasonably* suggested to one of ordinary skill the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, (Fed. Cir.), *cert. denied,* 493 U.S. 975 (1989). Therefore, a reference cannot be relied upon for a suggestion that is contrary to accepted wisdom.

Scott precludes non-ionic surfactants because one of ordinary skill in the art would have known to avoid such surfactants to prepare the polymer of Scott. Scott clearly states that its latexes are "prepared by emulsion polymerization of vinylidene chloride and acrylonitrile...." Col. 2, lines 21-22. According to Scott, the surfactant *must* therefore facilitate an emulsion polymerization; and, more specifically, Scott states this *may* be a "conventional emulsion polymerization procedure." Id. at lines 36-54. In either case, Scott

[1] This is a new assertion because the previous allegation of functional equivalence was in reference to two non-ionic surfactants, Triton-X and Tween. OA of January 25, 2008, p. 5.

cannot be taken to reasonably suggest all types of surfactants at least because a non-ionic surfactant is *not* a functional equivalent for an anionic surfactant:

> Anionic surfactants are the most commonly used surfactants in emulsion polymerization. ... Nonionic surfactants are only infrequently used alone, since *their efficiency in producing stable emulsions is less* than that of the anionic surfactants.

Principles of Polymerization, 3rd Ed., G. Odian, 1991, p. 349. (Internal citations omitted) (Exhibit A) (Emphasis added).

The Office Action has incorrectly concluded that classes of surfactants would be functionally equivalent. "Emulsifiers of ionic and non-ionic nature have been used as functional equivalents in coating compositions for food...."[2] OA, p. 4. Further, it is alleged that one of ordinary skill in the art would have been motivated:

> [T]o modify the [anionic] surfactant taught by Scott and use another [non-ionic] surfactant, such as, Polysorbate 80 ... or Tween™ or Triton™-X ... in order to make an [sic] suitable coating composition that can be applied to fruits as an aqueous suspension.

Id., p 4. In a decision that post-dates the present final Office Action, the Federal Circuit stated that when only the *classes* of materials are considered, there can be a failure to understand the fundamental difference:

> It is therefore evident that even though the patents disclose *the same classes of polymeric materials* used to form the packaging material, the containers described in Komatsu and in the '942 patent *are different in a way that the '942 patent treats as important to the invention.* In essence, the Komatsu container is formed by heat-sealing a microporous layer with a high softening point to an inner laminate layer with a low softening temperature. In contrast, the '942 container is formed by sealing a microporous layer with a low softening point to an inner laminate layer that also has a low softening temperature. *The district court looked only to the classes of materials described in the patents* and did not examine the softening points of the materials. It therefore failed to recognize that Komatsu discloses the use of incompatible materials where the '942 patent requires compatible materials, and *it therefore incorrectly concluded that Komatsu teaches the same container as that claimed in the '942 patent.*

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[2] Applicant notes that the general statement that non-ionic and ionic surfactants are known to be functionally equivalent appears to be Official Notice that has not been properly supported by evidence. Thus, it is over-reaching.

Süd-Chemie, Inc. v. Multisorb Technologies, Inc., ---F.3d----, 2009 WL 212413 (Fed. Cir. 2009) (Emphasis added). Similarly, the Office Action concludes that surfactant classes are functionally equivalent without examining the required technical function of the surfactant in Scott.

In view of the above, one of ordinary skill in the art would not have been motivated to simply substitute a non-ionic surfactant into the process of Scott. He or she would have realized the technical hurdles in doing so. Therefore, Scott is precluded from reasonably suggesting a non-ionic surfactant.

The combined teachings of the cited references do not overcome the deficiencies of Scott. In Liu, the emulsifier "enhances the effectiveness of gibberellins(s) and permits somewhat lower concentrations of gibberellins(s) to be used in the treating medium." Col. 3, lines 60-63. In Nisperos-Carriedo, the emulsifier simply facilitates mixing of the pre-formed polysaccharide polymer into the coating composition. Col. 6 lines 60 through col. 7, lines 38. However, neither reference suggests that the surfactants are equivalent in the process of Scott.

With regard to claims 4 and 6, the Office Action further cites Yang et al. (USPN 6,165,529) ("Yang"). Applicant respectfully traverses. Yang is used for its disclosure of an antimicrobial agent. OA of January 25, 2008, p. 6. With regard to a surfactant, Yang merely discloses that the

> surfactant reduces the surface tension of the starch and the PVOH [polyvinyl alcohol] and facilitates the formation of a very uniform and homogenous coating composition.

Col. 4, lines 10-14. In view thereof, the addition of Yang cannot overcome the deficiencies in Scott.

With regard to claim 5, the Office Action further cites Bice et al. (USPN 3,674,510) ("Bice"). Applicant respectfully traverses. Bice is used for its disclosure of an anti-fungal agent. Id., p. 7. Bice does not teach any surfactant, and only states that TBZ could be applied as an aqueous suspension or dispersion. *See*, e.g., col. 3 lines 10-12. In view thereof, the addition of Bice cannot overcome the deficiencies in Scott.

Claims 1, 2 and 12 have been rejected as being unpatentable over Scott in view of Lee (USPN 4,729,190) ("Lee"). Lee is directed to a *blend* of a polymeric carboxylic acid and a surfactant. Lee does not teach or suggest that a non-ionic surfactant can replace the surfactant used in Scott. Therefore, Lee cannot overcome the deficiencies of Scott.

Likewise, with regard to claim 4, the addition of Yang (discussed above) to Scott and Lee cannot overcome the deficiencies in Scott. Nor can the addition of Bice (discussed above) to Scott and Lee overcome the deficiencies in Scott with regard to claim 5.

For the foregoing reasons, Applicant respectfully requests withdrawal of all rejections and favorable consideration of claims 1, 2, 4-6 and 12. A Notice to this effect is respectfully requested. If any questions remain, the Examiner is invited to contact the undersigned at the number given below.

Respectfully submitted,

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